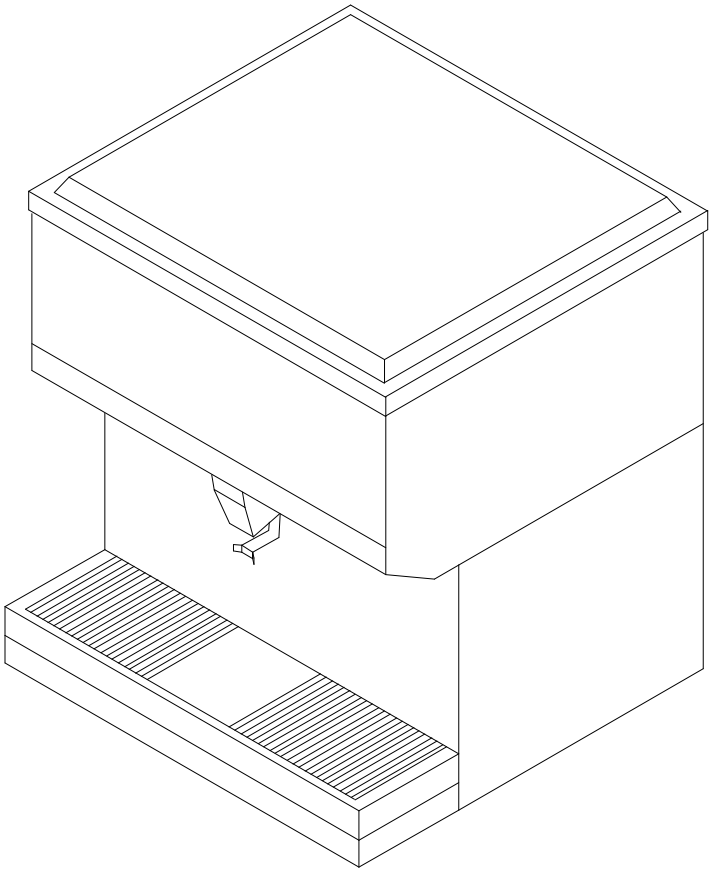
ICE/BEVERAGE DISPENSERS

MODELS: TJ200, TJ200A, TJ200K
TK250, TJ250A, TJ250K
TJ300, TJ300K

Operator's Manual



Part No. 90683
August, 1995
Revision F

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION

This Manual must be read and understood before installing or operating this equipment

â REMCOR INC:

PRINTED IN U.S.A

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Manufactured Under One or More of the Following Patent Numbers:
3,211,336, 3,274,792, 3,393,839 , 3,517,860, 3,739,842, 4,215,803, 4,227,377, 4,300,359, 4,346,824
Canadian Patent Numbers 912,514 (10/72), 936,855 (11,73), 4,429,543, 4,921,149
Other Patents Pending

SAFETY PRECAUTIONS

This ice dispenser has been specifically designed to provide protection against personal injury and eliminates contamination of ice. To insure continued protection and sanitation, observe the following

Always disconnect power to the dispenser before servicing or cleaning.

Never place hands inside of hopper or gate area without disconnecting power to the dispenser. Agitator rotation occurs automatically when the dispenser is energized!

ALWAYS be sure the removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of ice.

ALWAYS be sure the upper and lower front panels are securely fastened.

ALWAYS keep area around the dispenser clean of ice cubes.

CAUTION: Dispenser cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which "jam up" inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces before filling into the dispenser hopper.

GENERAL DESCRIPTION

The Remcor TJ220 / 250 / 300 series of ice dispensers solve your ice service needs the sanitary, space saving, economical way. Designed to be manually filled with ice from any remote ice making source, or to be used with one of several "piped ice" type ice makers or top-mounted "ice cuber,"

These dispensers will dispense cubes (up to1-3/8" in size), cubelets, hard-chipped or cracked ice. Remcor dispensers cannot be used with crushed or flaked ice.

Model Designation: TJ 1 2 3

Cabinetry Options:

(E) Neutral beige, baked enamel finish and wood grain vinyl-clad upper front panel.

(S) All Stainless Steel.

Ice Fill Options:

(No Letter) Manually filled from remote ice maker.

(A) Automatic fill from a "piped ice" type ice maker.

(K) Automatic fill from a top-mounted "ice cuber".

Example: Model TJ205s "K" has a 250 pound ice storage capacity with a stainless steel cabinet and is designed for automatic filling from a top-mounted ice maker.

Table 1. Specifications

Model:	**TJ200**	**TJ250**	**TJ300**
Ice Storage:	200 lbs.	250 lbs.	300 lbs.
Electrical:	115 Volts 1 Phase 60 Hertz, 6.0 Amps		
Electrical Connection:	Standard and "K" models: supplied with 6', 3-wire Cord with 3-prong Ground Type Plug "A" Models: Supplied with 2 x 4 junction box located in lower cabinet enclosure for permanent wiring installation.		
Drain Connection:	7/8" ID Hose	7/8" ID Hose	7/8" ID Hose
Dimensions:	32"W x 38-5/8"H x 36"D	32"W x 42-1/4"H x 36"D	32"W x 44-1/4"H x 36"D
Shipping Weight	220 lbs.	245 lbs.	260 lbs.
Operating Weight (Less Ice Maker)	420 lbs	495 lbs.	560 lbs.

ICE MAKER

REMCOR "A" and "K" model ice dispensers are designed to be used with one of several "piped ice" type ice makers or top-mount "ice cubers." These must be obtained from the appropriate manufacturer or distributor in your area.

FEED TUBE OR ICE MAKER INSTALLATION KIT

This kit contains parts and instructions necessary to connect the ice maker to the ice dispenser. Be sure the kit you receive is proper for your ice maker. The following kits are approved for use on the TJ200 / 250 / 300 "A," "K" dispensers:

"A" MODEL DISPENSERS

KIT NUMBER	ICE MAKER	MODEL
1913	Reynolds	CF-3-TT
1922	Reynolds	CF-6-TT
1923	Jieto	MD700
1924	Scotsman	EC900

"B" MODEL DISPENSERS

KIT NUMBER	ICE MAKER	MODEL
1930 (TJ300)	Ice-O-Matic	C20 / 40 / 60
2097 (TJ250)	Ice-O-Matic	C20 / 40 / 60
1931	Manitowoc	200 / 400 / 600
1932	Kold Draft	GT300 / 400 / 500 / 600
2011	Scotsman	CM250 / 450 / 500 / 650
2012	Hoshizaki	KM451 / 452 / 630 / 632

INSTALLATION INSTRUCTIONS

1. The ice dispenser must be sealed to the counter The template drawing (Figure 6) indicate openings which must be cut in the counter. Locate the desired position for the dispenser, then mark the outline dimensions on the counter using the template drawings. Cut openings in counter.

   Apply a continuous bead of *NSF International* (NSF) listed silastic sealant (Dow 732 or equal) approximately 1/4" inside of the unit outline dimensions and around all openings. Then position the unit on the counter within the outline dimensions. All excess sealant must be wiped away immediately. "A" models must be fastened in place with mounting hardware provided.

2. **"A" and "K" Models Only:** Install the ice maker according to the instructions supplied with the kit, and manufacturer's instructions supplied with the ice maker.

3. Connect the drain tube to an open drain. If additional piping is required, it must be 3/4" IPS (or equal). This line must continually pitch downward away from the unit and must contain no traps, or improper drainage will result.

4. Clean the ice dispenser interior (see CLEANING INSTRUCTIONS).

5. Connect the power cord to a 115 volt, 60 cycle, 3-wire grounded receptacle. "A" models must be permanently wired and conform to NEC and local codes.

OPERATING INSTRUCTION

1. Ice Dispensing: Depressing the operating lever activates a micro switch behind the front panel which energizes the agitator motor and gate solenoid. This causes the agitator to rotate and the gate slide to lift, allowing ice to push out the gate opening.

2. Ice level (Standard Models): When ice level light is on, remove the lid and fill the hopper with ice. Replace lid to avoid contamination of ice.

CAUTION: Use caution to avoid spilling ice when filling dispenser. Clean up immediately any spilled ice from filling or operating the unit. To prevent contamination of ice, the lid must be stalled on the unit at all times.

Automatic Ice Filling ("A" models): While the ice maker is running, the ice entering the hopper from the feed tube should be loose and in small pieces. Ice entering in the form of hard-packed cylinders indicates a restriction or distortion of the feed tube and could result in ice maker malfunction, if not corrected. The automatic agitation timer causes the the ice to level which allows the entire storage bin to fill before the ice machine shuts off. When the ice level remains at the deflector after agitation, the ice maker control capillary (ice maker bulb) stops ice maker operation until the level drops and the bulbs warm up.

Immediately after ice maker shut-off, observe the ice in the hopper between the feed tube entrance and the deflector. it should be loosely pressed against the top of the deflector, indicating correct thermostat operation. If the ice level is low or if the ice is packed hard against the deflector, it will be necessary to re-adjust the ice maker bin control, according to the ice maker instructions. Adjust the control warmer to lower the ice level and colder to raise the ice level.

Automatic Ice Filling ("K" Models): As the "A" models, the agitation tier causes the ice to level which allows the entire storage bin to fill before the ice machine shuts off. The ice maker control capillary bulb maintains the ice level in the storage hopper. Consult the instructions provided with the installation kit and the ice maker manual for location and operation of the ice maker control.

31177 PORTION CONTROL OPERATING INSTRUCTIONS

For use on all "TJ" series ice dispensers

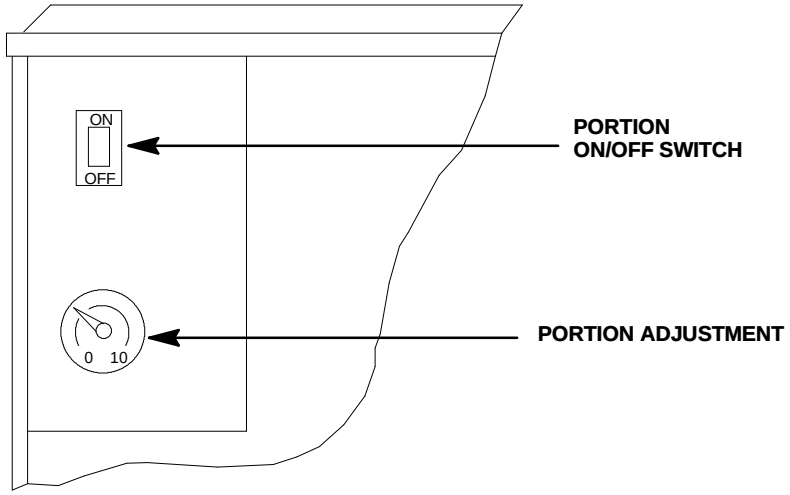


FIGURE 1. PORTION CONTROL

Switch "Off" Ice dispenses continuously (no portion control) when operating lever is depressed.

Switch "On" Ice dispenses for preset time period and stop automatically. Timer resets when operating lever is released.

Portion Adjustment Turn knob clockwise to increase portion, counterclockwise to decrease portion. Numbered dial is for reference only. Approximate settings are as follows:

6 oz. cup .5-1.5 or 12 oz. cup 1-3

Adjust the knob to obtain the desired ice portion.

CLEANING INSTRUCTIONS

WARNING: DISCONNECT POWER BEFORE CLEANING! Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover and the agitator disk, as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic material.

DISPENSER

1. Clean the ice dispenser interior at least once a month.
2. Remove the agitator bolt and lift off the agitator and the agitator disk. Wash with a mild detergent solution and rinse them thoroughly to remove all traces of detergent.
3. Carefully remove, wash and rinse all internal hopper components.
4. wash down the inside of the hopper and top cover with a mild detergent solution and rinse thoroughly to remove all traces of detergent.
5. Replace the agitator and other components.
6. Sanitize the inside of the hopper and agitator with a solution of 1 ounce of household bleach in 2 gallons of water. (200 PPM)
7. Remove Ice Chute cover as follows:
   A. Flex sides outward to disengage lower pins.
   B. Lift Ice Chute cover to disengage upper pins.
   C. Lower Ice Chute cover down out of unit. Note: it may be helpful to twist cover slightly.
8. With brush provided clean the inside of the ice chute and ice chute cover with a mild detergent solution and rinse thoroughly to remove all traces of detergent.
9. Reverse steps above to reassemble ice chute.
10. Sanitize as described in Step 6.

MAINTENANCE

The following dispenser maintenance should be performed at the intervals indicated:

DAILY or as required

Remove foreign material from the vending area sink to prevent drain blockage.

WEEKLY or as required

Clean vending area. Check for proper water drainage from the vending area sink.

MONTHLY

Clean and sanitize the hopper interior (see CLEANING INSTRUCTIONS).

If the dispenser fails to dispense ice when operated, check that the hopper has ice in it and that power is being supplied to the unit. If the problem persists, check the following:

1. Determine if the agitator is rotating (check for the sound of ice movement in the hopper).
2. Observe whether the gate is operating.

After checking the above, refer to the TROUBLESHOOTING GUIDE for possible problem causes and corrective action.

GATE RESTRICTOR PLATE

CAUTION: Disconnect power to dispenser before installing, removing or adjusting restrictor

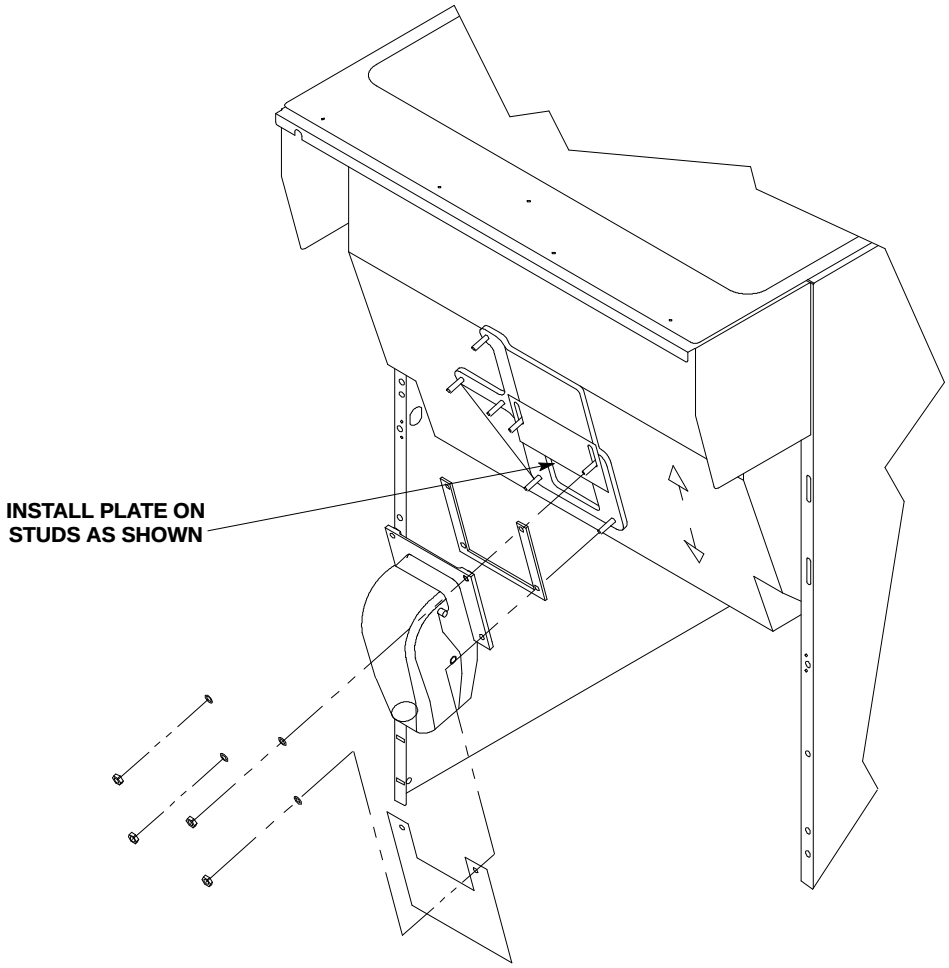


FIGURE 2. GATE RESTRICTOR PLATE

ADJUSTMENT

This dispenser is provided with a gate restrictor plate, installed in its highest position.

This plate adjusts the rate of ice flow from the dispenser. In applications using buckets, carafes or other large containers, the plate may be removed entirely for maximum ice flow. For glasses and cups, the plate may be adjusted downward to reduce the flow of ice. The best position depends on the type of ice being used and the size container, and must be found by trial and error. Adjustment is made by loosening the upper two ice chute retaining nuts, sliding the restrictor plate to the desired position and re-tightening the nuts.

If the dispenser fail to dispense the ice when operated, check that the hopper has ice in it and that power is being supplied to the unit. If the problem persists, check the following.

1. Determine if the agitator is rotating (check for the sound of ice movement in the hopper).

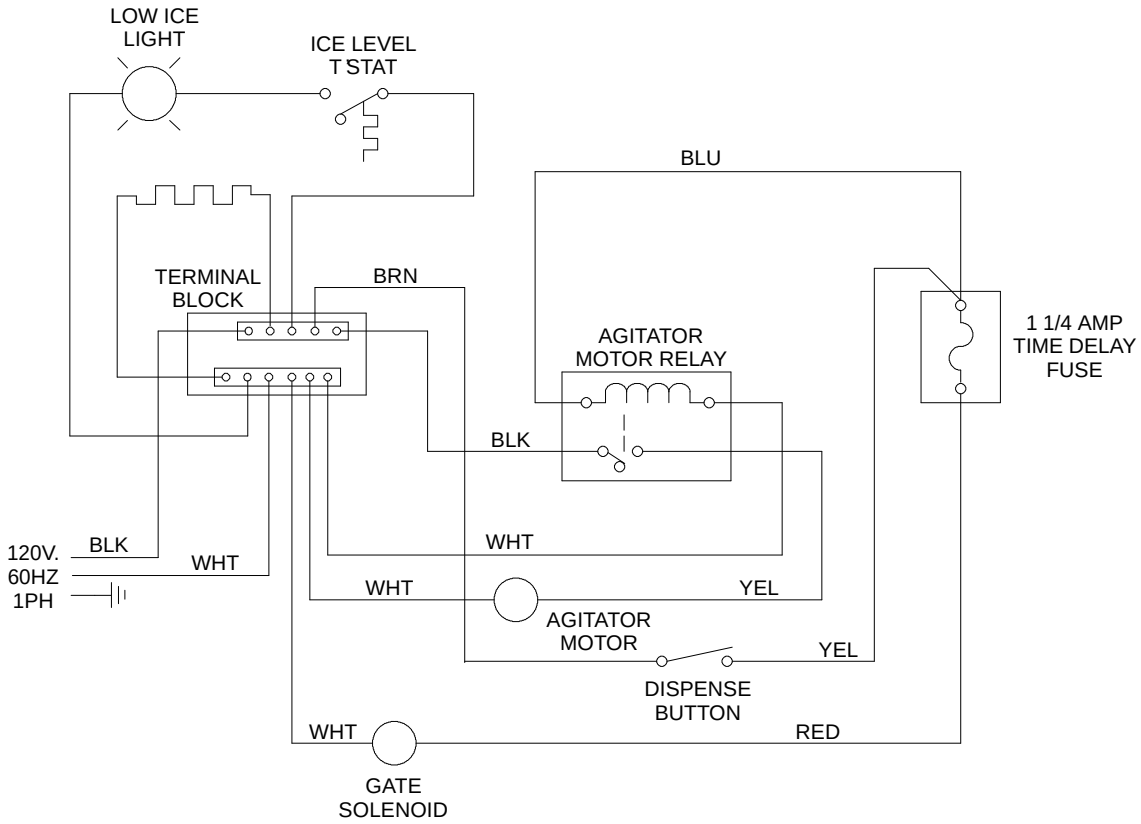
2. Observe whether the gate is operating.

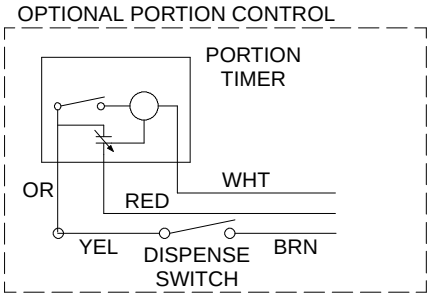
TROUBLESHOOTING GUIDE

Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

Trouble		Probable Cause
BLOWN FUSE OR CIRCUIT BREAKER	A.	Short circuit in wiring.
	B.	Defective gate solenoid.
	C.	Defective agitator motor.
GATE DOES NOT OPEN. AGITATOR DOES NOT TURN	A.	No power.
	B.	Bent depressor plate (does not actuate switch).
	C.	Defective dispensing switch.
GATE DOES NOT OPEN OR IS SLUGGISH. AGITATOR TURNS.	A.	Defective gate solenoid.
	B.	Weak gate spring.
GATE OPENS. AGITATOR DOES NOT TURN.	A.	Agitator motor protector tripped.
	B.	Defective agitator motor.
	C.	Defective agitator relay.
ICE DISPENSES CONTINUOUSLY.	A.	Stuck or bent depressor plate (does not release switch).
	B.	Defective dispensing switch.
	C.	Improper switch installation.
SLUSHY ICE. WATER IN HOPPER.	A.	Blocked drain.
	B.	Unit not level.
	C.	Ice maker malfunction.
ICE SOLIDIFIED IN HOPPER OR ICE AT REAR CORNER ONLY.	A.	Defective or improperly adjusted ice maker thermostat.
NO ICE IN HOPPER	A.	Ice maker malfunction.
ICE PACKED IN HOPPER	A.	Defective or improperly adjusted ice maker control (not shutting off).

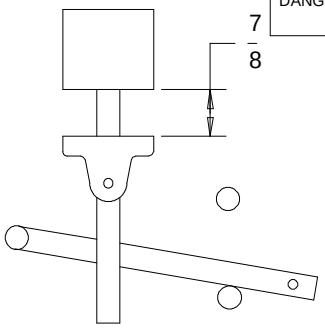
Refer to manufacturer's instructions for troubleshooting ice maker.





SERVICE INFORMATION

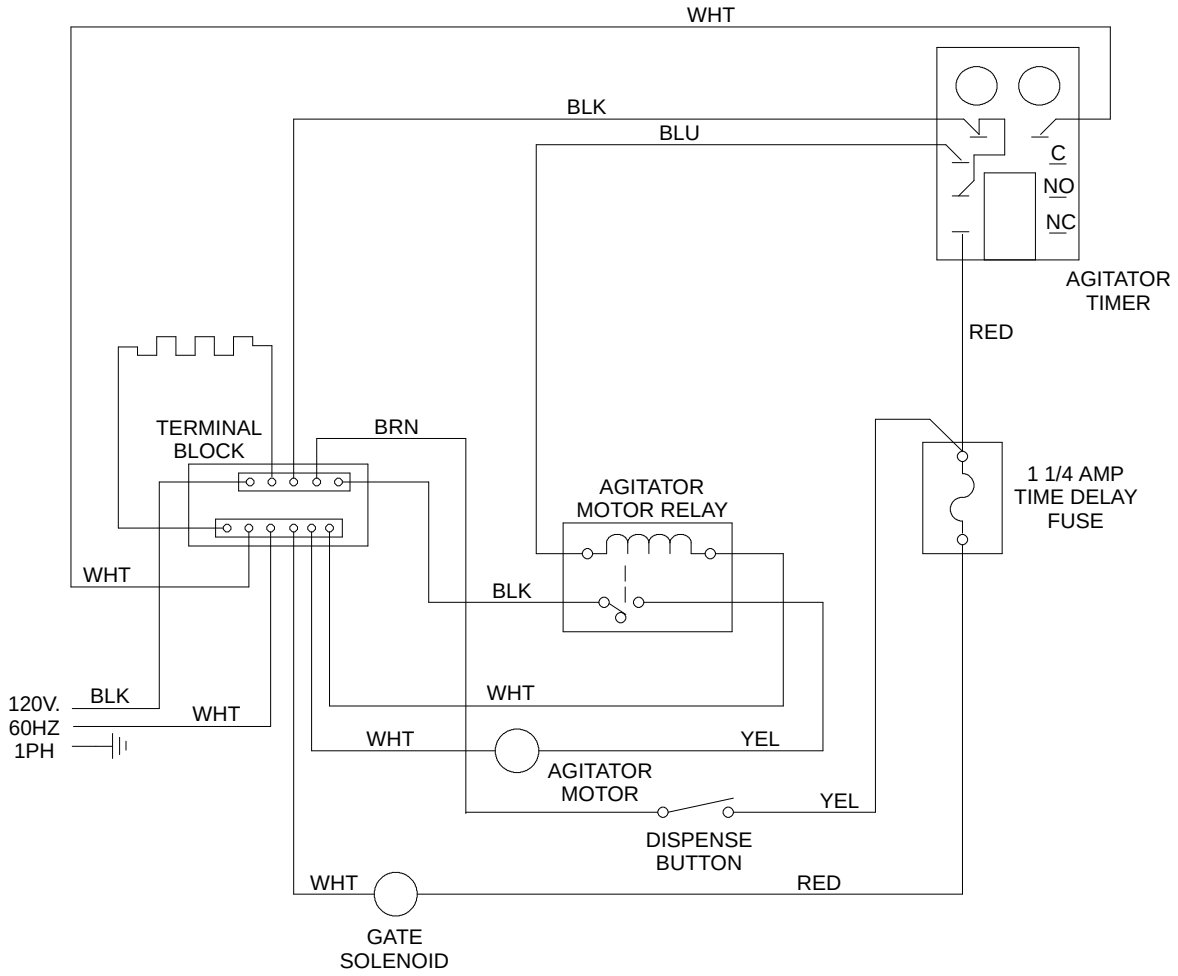
DANGER! ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.

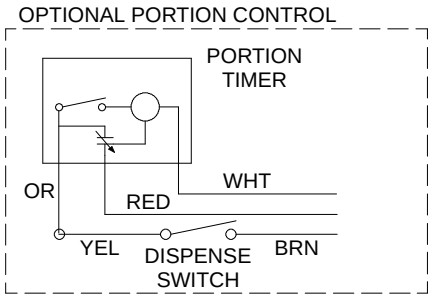


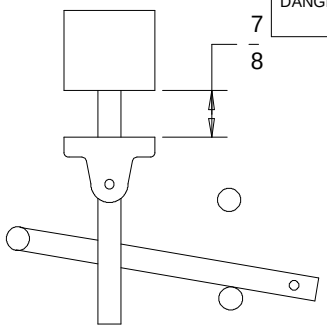
SOLENOID ADJUSTMENT

WHEN REPLACING SOLENOID
ADJUST TO 7/8 AS SHOWN
BEFORE TIGHTENING
MOUNTING SCREWS

FIGURE 3. WIRING DIAGRAM TJ200 / 250 / 300







SERVICE INFORMATION

DANGER! ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.

SOLENOID ADJUSTMENT

WHEN REPLACING SOLENOID
ADJUST TO 7/8 AS SHOWN
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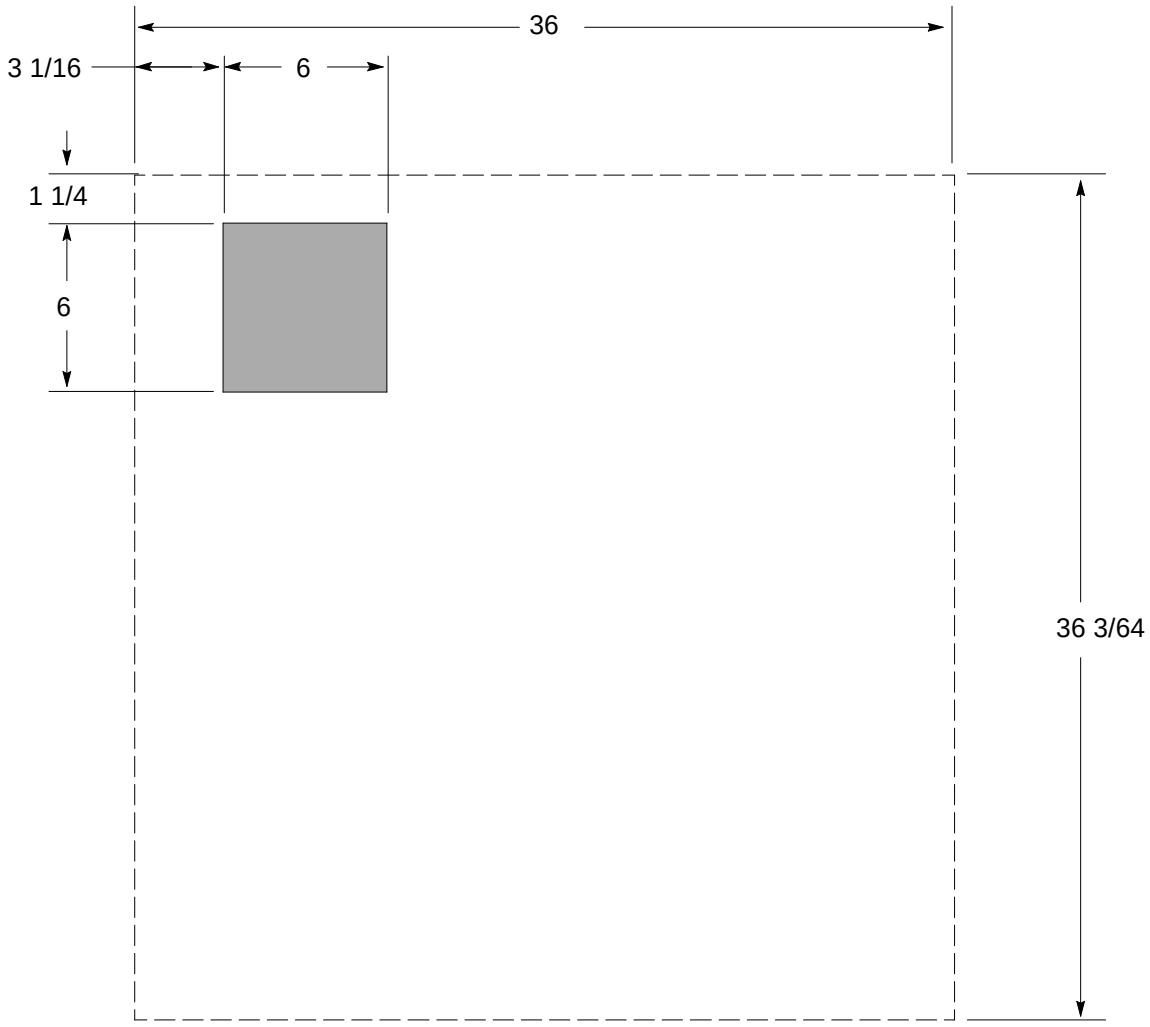
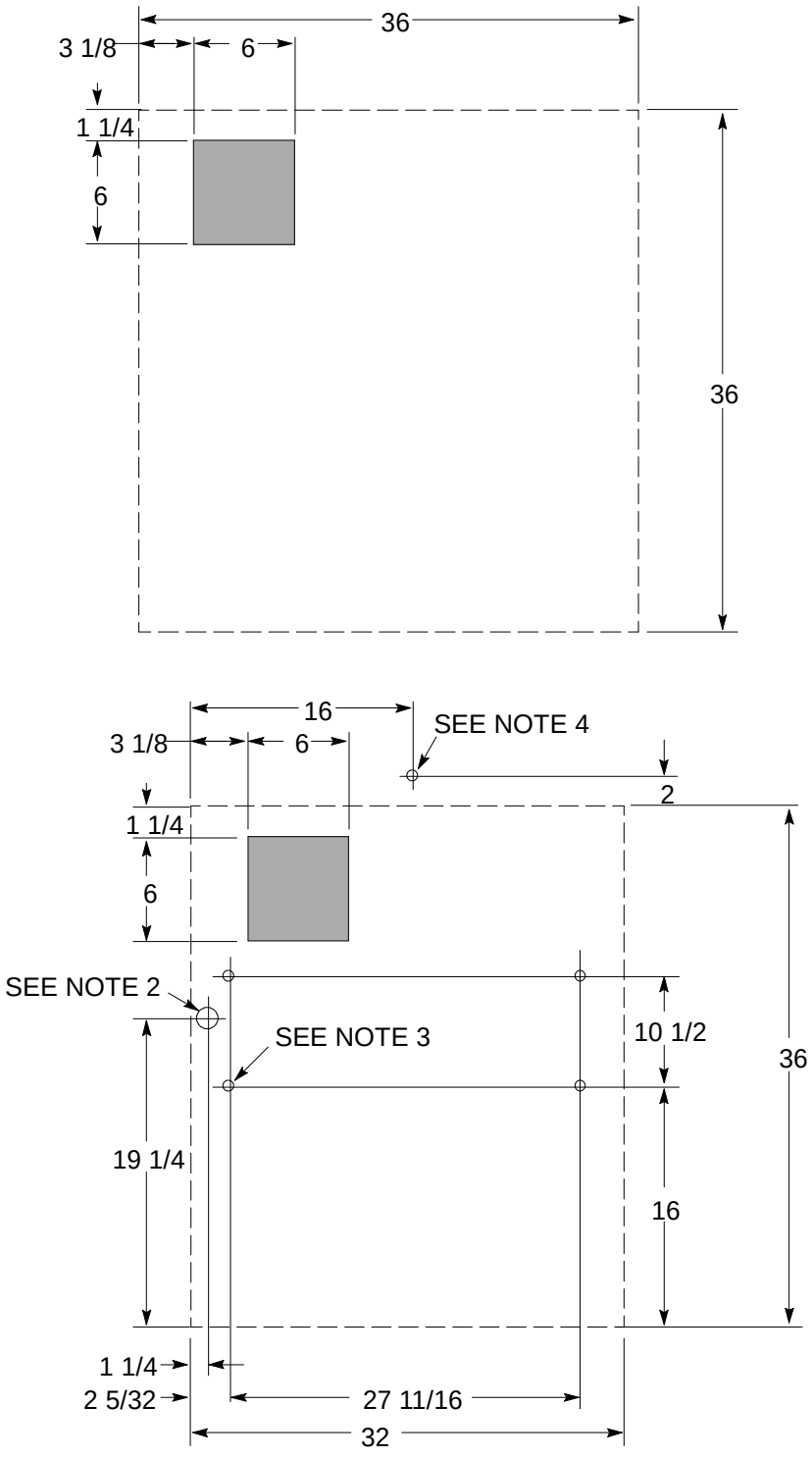
MOUNTING SCREWS

FIGURE 4. WIRING DIAGRAM TJ200 / 250 / 300– A, K DISPENSER



NOTE: SHADED AREAS INDICATE OPENINGS IN COUNTER REQUIRED FOR UTILITIES AND BEVERAGE TUBING.

FIGURE 5. MOUNTING TEMPLATE MODEL TJ300



NOTES:

1. SHADED AREAS INDICATE OPENINGS IN CABINET BOTTOM NEEDED FOR UTILITIES.
2. 1 1/8 DIA. ACCESS HOLE FOR ELECTRICAL SUPPLY CONDUIT.
3. FOUR 3/8 DIA. HOLES FOR SECURING UNIT TO COUNTER.
4 1/2 DIA. ACCESS HOLE FOR ICEMAKER CONTROL BULB.

FIGURE 6. MOUNTING TEMPLATE TJ200 / 250 / TJ200 / 250-A, K

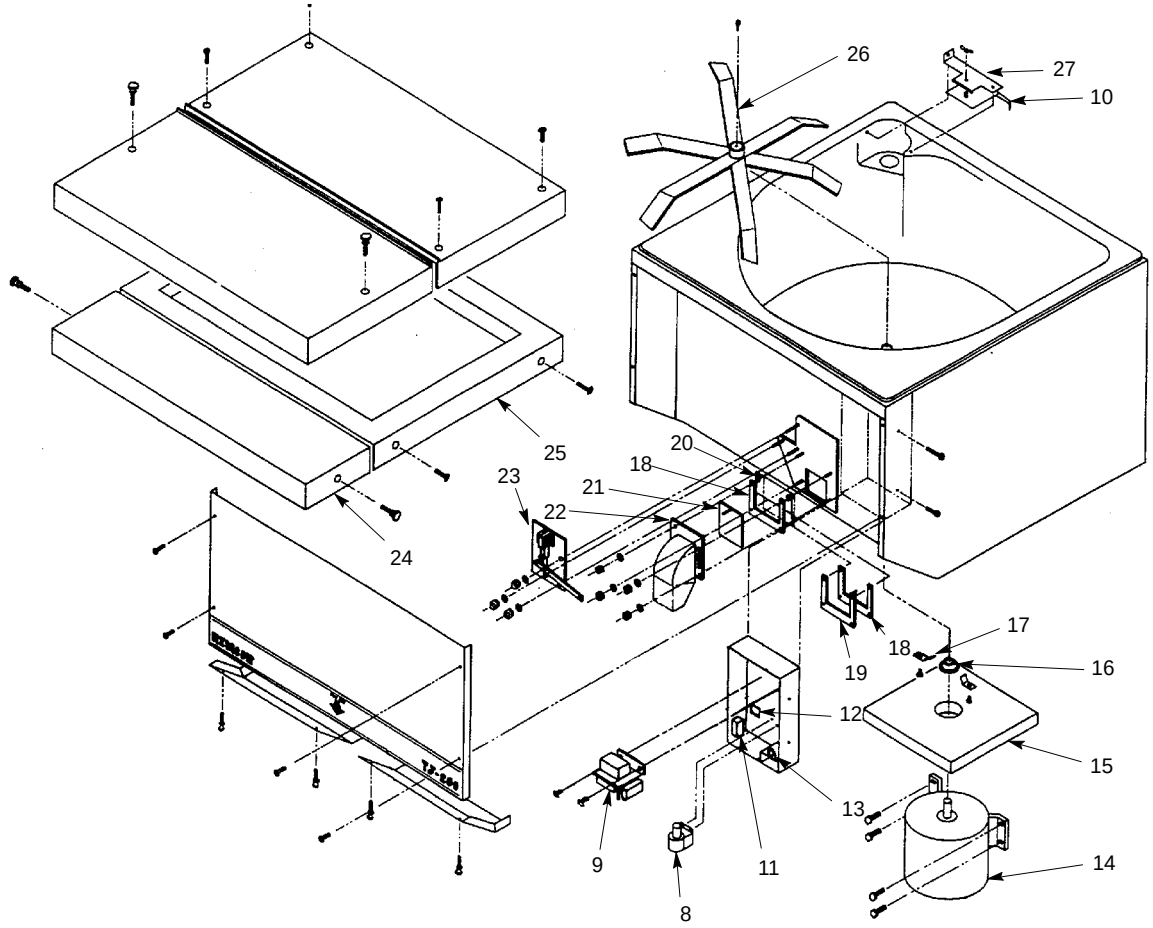


FIGURE 8. EXPLODED VIEW UPPER SECTION

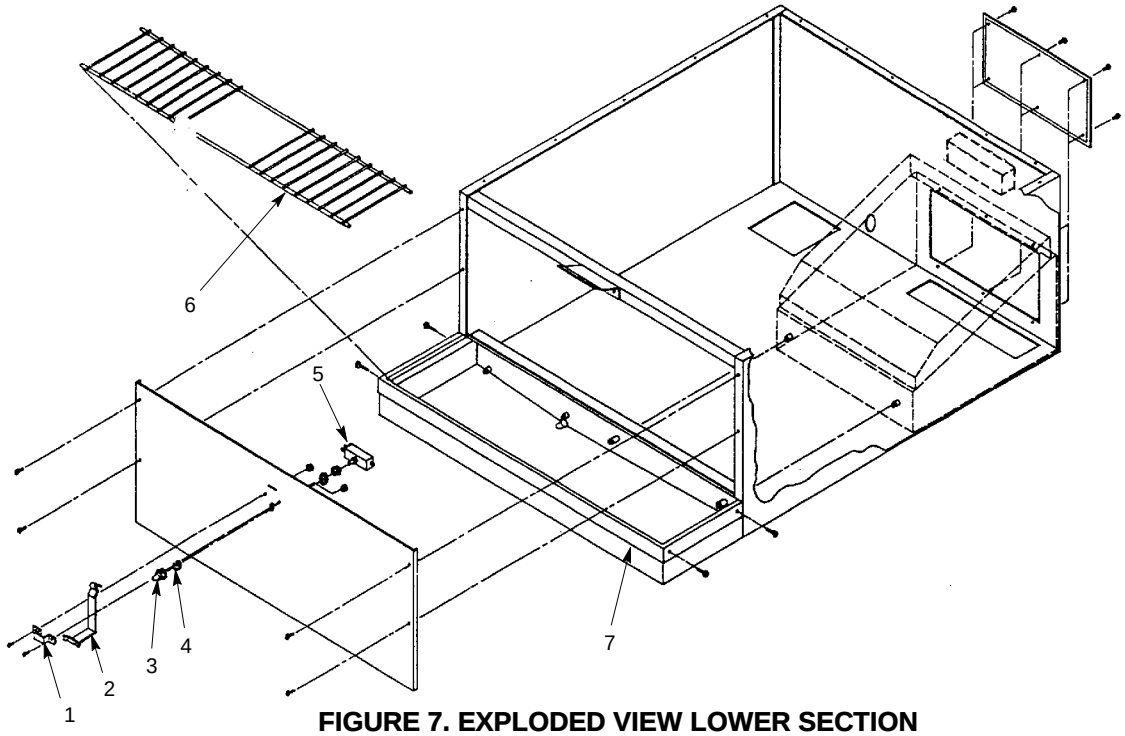


FIGURE 7. EXPLODED VIEW LOWER SECTION

EXPLODED VIEW UPPER AND LOWER PARTS LIST

Item No.	Part No. TJ200/250	Part No. TJ200/250 "A"	Part No. TJ200/250 "K"	Part No. TJ300 "K"	Description
1	22644	22644	22644	22644	Depressor Retainer
2	22777	22777	22777	22777	Depressor Lever
3	31007	31007	31007	31007	Switch Boot
4	31163	31163	31163	31163	Boot Adapter
5	30895	30895	30895	30895	Dispensing Switch
6	70496	70496	70496	70710	Sink Grill
7	51024	51024	51024	51646	Sink
8	31375	31375	31375	31375	Mercury Relay
9		31763	31763	31763	Agitation Timer
10		22441			Bracket-Ice Deflector
11	31001				Ice Level Thermostat
12	30960	30960	30960	30960	Terminal Board
13	31205				Ice Level Light
14	31197	31197	31197	31617	Agitator Motor
15	50967	50967	50967	50967	Insulation (Agitator Motor)
16	50891	50891	50891	51101	Motor Shaft Seal
17	22402	22402	22402	22402	Bracket-Hopper Seal
18	50770	50770	50770	50770	Gate Gasket
19		22519			Ice Diverter
20	22081	22081	22081	22081	Gate Restrictor
21	21491	21491	21491	21491	Gate Slide
22	53015	53015	53015	53015	Ice Chute Back Section
	53016	53016	53016	53016	Ice Chute Cover
23					Solenoid Assembly (Figure 9)
	31551	31551	31551	31551	Solenoid
	70438	70438	70438	70438	Rebuilding Kit
24	50962	50962	22082	25454	Lid-Removable
25	50963	50963	22084	25452	Cover Assembly - Rear
26	22047	22047	22047	25744	Agitator (TJ200)
	23692	23692	23692		Agitator (TJ250)
27		22339			Deflector Assembly

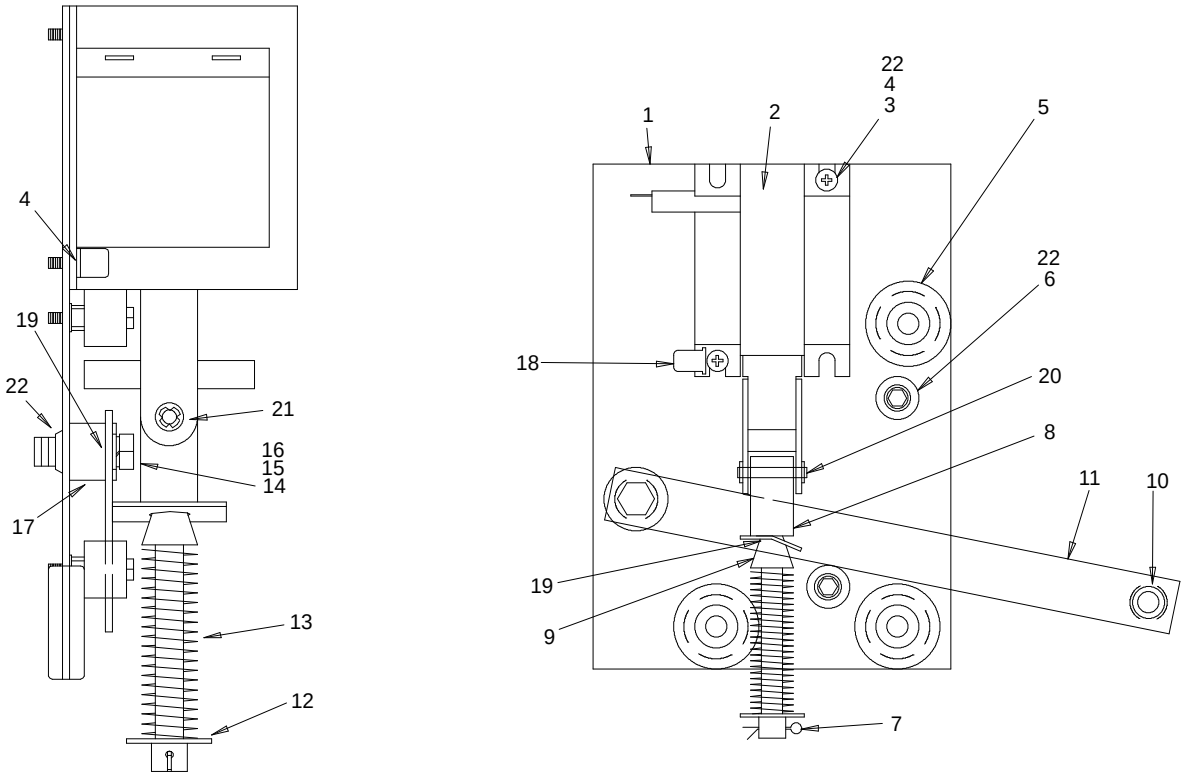


FIGURE 9. SOLENOID ASSEMBLY

Index No.	Part No.	Qty.	Name
1	21493	1	Solenoid Mounting Plate
2#	31551	1	Solenoid Service Kit
3	70171	2	8–32 x 3/8 Phil Tr HD Screw
4	70121	2	No. 8 Lockwasher
5	50752	3	Isolator
6*	50789	2	Bumper Assembly
7*	70423	1	Cotter Pin
8*	10080	1	Gate Lift Rod
9	10081	1	Gate Lift Rod Bushing
10	50754	1	Gate Arm Bearing
11	21492	1	Gate lift Arm
12	70043	1	Flatwasher
13*	70422	1	Spring
14	70263	1	1/4-20 x 3/4 Hex Hd Screw
15	70048	1	1/4 Lockwasher
16	70066	1	1/4 Flatwasher
17	10077	1	Pivot Bearing
18	30227	1	1/4 Quick Connect Tab
19	50305	––	Lubricant
20*	21592	1	Solenoid Linkage Pin
21*	70433	2	Retainer Ring
22	51088	––	Loctite
––*	70438	––	Rebuilding Kit

NOTE: * Parts supplied with rebuilding kit.
 # 31551 solenoid supplied with items 20 & 21.

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WARRANTY

IMI Cornelius Inc. and Remcor Products Company warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius and or Remcor product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number, serial number and the date of purchase.

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BELGIUM ● BOSKAPELLEI 122 ● B-2930 BRAASCHAAT, BELGIUM ● (32) 3 664 0552 ● FAX (32) 3 665 2307
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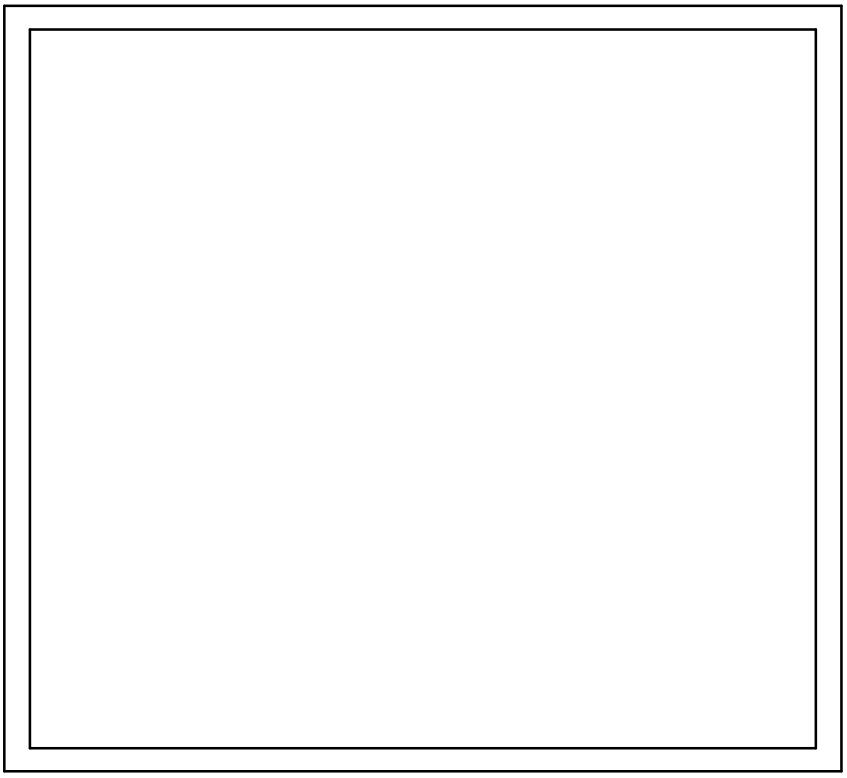

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